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EXAMINER	
KOMOL, VAJIRACHAI	

ART UNIT	PAPER NUMBER
2115	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/043,402	GARDINER ET AL.	
	Examiner	Art Unit	
	Vajirachai Komol	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-71* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 1 – 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papa et al [hereinafter Papa, U.S. Pat. 6,418, 492].

Regarding to claim 1, Papa teaches a method for reconfiguring a second system [92c, fig. 3] in a system comprising a host computer system [90, fig. 3] coupled through a communication medium to the second system, wherein the host computer system includes host driver software [98, fig. 3], the method comprising:

- the host computer system [90, fig, 3] saving configuration information [110, 112, fig. 3] for the second system [92c, fig. 3];
- receiving user input requesting a power down [800, 812, fig. 8a] condition for the second system;
- the second system generating an indication [816, fig. 8a] of the power down condition to the host computer system in response to said user input;
- the host driver software entering a quiescent state [802, fig, 8a];
- powering down the second system [814, fig. 8a], wherein the second system is operable to be reconfigured [col. 20, lines 42 – 43] by a user after said powering down;
- powering up the second system [850, 852, 854, fig. 8b] after said powering down and after the second system has been reconfigured[1] by a user;

[1] After a card has been added/swapped into the slot.

- the host computer system detecting [856, fig. 8b] said powering up of the second system; and
- the host computer system restoring second system configuration using said configuration information [870, fig. 8b].

However, Papa does not explicitly teach:

- the host computer receiving the indication of the power down condition; and
- the host driver software entering a quiescent state after receiving the indication.

Specifically, Papa allows the host driver software entering a quiescent state [802, fig. 8a] before receiving the indication. Papa further teaches a LED indicator to indicate the host system and the user of the power down condition by changing the color of the LED from green to amber.

As such, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Papa to allow the host driver software entering a quiescent state after receiving the indication instead of entering a quiescent state before receiving the indication as taught by Papa.

Regarding to claim 2, Papa does not explicitly teach that receiving user input comprises receiving user input at the second system. Specifically, Papa enters input from the host computer system. As such, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Papa to also allow users to enter input from the second system.

Regarding to claim 3, Papa further teaches that the host computer system is coupled to the second system through a split bridge [122a, fig. 3].

2. Claims 4 – 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papa et al [hereinafter Papa, U.S. Pat. 6,418,492] in view of Strum et al [hereinafter Sturm, U.S. Pat. 6,687,779].

Regarding to claim 37, Papa teaches a distributed system, the system comprising:

- a host computer system [90, fig. 1], wherein the host computer system comprises:
  - a CPU [102, fig. 1]; and
  - a memory [104, fig. 1];
  - wherein the memory is operable to store host driver software [98, fig. 1]; and
- a bridge [122a, fig. 1] which is operable to couple to the host computer system;
- a second system [92a, fig. 1] which is operable to couple to the host computer [90, fig. 1] system via the bridge;
- wherein the host computer system is operable to:
  - save configuration information for the second system [110, 112, fig. 1]
- wherein the host driver software is executable to enter a quiescent state [802, fig. 8a] in response to the indication of the power down condition; and
- wherein the host computer system is operable to:

- receive user input requesting a power down condition [800, 812, 814, fig. 8a];
- generate an indication of the power down condition [816, fig. 8a] in response to said receiving user input requesting the power down condition;
- detect a link down condition [816, fig. 8a] between the host computer system and the second system in response to a user powering down the second system to reconfigure the second system;
- determine a link status [816, fig. 8a or 856, fig. 8b], wherein the link status comprises either the link down condition[2] or a link up condition[3] between the host computer system and the second system;
- detect the link up condition [856, fig. 8b] between the host computer system and the second system in response to the user powering up the second system after reconfiguring the second system; and
- restore second system configuration using said configuration information [820, fig. 8a and 870, fig. 8b].

However, Papa does not explicitly teach:

- the CPU is operable to execute the host driver software;
- a serial bus which is operable to couple to the host computer system;
- wherein the second system is operable to:
  - receive user input requesting a power down condition; and

[2] Amber on the LED indicates link down condition.
[3] Green on the LED indicates link up condition.

- generate an indication of the power down condition in response to said receiving user input requesting the power down condition;

Specifically, Papa uses a bridge [122a, fig. 1] to connect the host computer system [90, fig. 1] to the second system [92a, fig. 1]. Papa further teaches that the user input for power down is enter through the host computer system. Papa uses a LED to indicate the link condition between the host computer system and the second system – Amber indicates link down condition and Green indicates link up condition.

Strum teaches:

- a host computer system [102, fig. 7], wherein the host computer system comprises:
  - a CPU [112, fig. 7]; and
  - a memory [116, fig. 7].
- a serial bus [160, fig. 7] which is operable to couple to the host computer system; and
- a second system [104, fig. 7] which is operable to couple to the host computer [102, fig. 7] system via the serial bus.

As such, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Papa and Strum because they both directed to the teachings of connecting a host computer system to a secondary system and Strum teaches the details of the serial bus connecting the two systems together. Also, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Papa to allow users to enter input for power down from the second system. Also, a routineer in the art

would clearly recognize that the limitation: the CPU is operable to execute the host driver software is inherent in Papa's system.

Regarding to claim 4, Papa further teaches:

- the host computer system [90, fig. 1] is coupled to the second system through a bridge [122a, fig. 1];

However, Papa does not explicitly teach:

- the bridge comprises a first interface comprised in the host computer system, a second interface comprised in the second system, and a communication medium coupling the first interface and the second interface;

Strum teaches a first interface [152, fig. 7] comprised in the host computer system [102, fig. 7], a second interface [158, fig. 7] comprised in the second system [104, fig. 7], and a communication medium coupling the first interface and the second interface [160, fig. 7].

As such, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Papa and Strum because they both directed to the teachings of connecting two systems together and Strum teaches the details of the interfaces which is missing in Papa system.

Regarding to claim 5, Strum further teaches:

- generating a first bus signal on a first bus [120, fig. 7] comprised in the host computer system [102, fig. 7];

- transmitting the first bus signal to the first interface [connection between bus 120 and interface 152];
- the first interface converting the first bus signal into a form suitable for transmission over the communication medium [convert using transceiver 154, fig. 7];
- the first interface transmitting the converted bus signal to the second interface over the communication medium [160, fig. 7];
- the second interface receiving the converted bus signal [connection between 102 and 104, fig. 7];
- the second interface converting the received converted bus signal to a form suitable for transmission to a second bus comprised in the second system, thereby generating a second bus signal [convert using transceiver 156, fig. 7]; and
- the second interface transmitting the second bus signal to the second bus comprised on the second system [connection between 158 and 132, fig. 7].

Regarding to claim 6, Strum further teaches that each of the first interface and the second interface include parallel/serial transceivers [154, 156, fig. 7] for converting parallel data generated on the first bus and second bus, respectively, to data in a form suitable for transmission on the communication medium and for converting data received from the communication medium to parallel data for generation on the first bus and second bus, respectively.

Regarding to claim 7, Strum further teaches that the communication medium comprises a serial bus [160, fig. 7].

Regarding to claim 8, Strum further teaches:

- wherein the first interface and the second interface collectively implement a register set of the bridge [col. 5, lines 25 – 26].

Regarding to claim 9, Strum further teaches:

- wherein the first interface and the second interface operate as a single PCI-PCI bridge [170, fig. 7];
- wherein the first interface and the second interface collectively implement a PCI-PCI bridge register set [col. 5, lines 25 – 26]; and
- wherein the first interface operates as a first portion of a PCI-PCI bridge, and wherein the second interface operates as a second portion of the PCI-PCI bridge.

Regarding to claim 10, Papa further teaches:

- wherein the second system comprises a remote system [92a, fig. 1] remotely located relative to the host computer system.

Regarding to claim 11, Papa further teaches that the second system comprises a remote system located more than about 2 meters from the host computer system [92a, fig. 1].

Regarding to claim 12, Papa further teaches:

- the host computer system detecting a link down [using LED 816, fig. 8a] condition between the host computer system and the second system after said powering down the second system; and
- the host computer system polling to determine a link status, wherein the link status comprises either the link down condition or a link up condition between the host computer system and the second system.

Regarding to claim 13, Papa further teaches:

- wherein said powering up the second system comprises reactivating the link between the host computer system and the second system; and
- wherein said host computer system detecting said powering up [using LED 856 , fig. 8b] further comprises the host detecting the link up condition between the host computer system and the second system.

Regarding to claim 14, Papa further teaches the polling to determine a link status comprises polling a register to determine the link status, wherein the register is comprised on the host computer system [fig. 6a].

Regarding to claim 15, Papa further teaches the indication of the power down condition comprises a hardware interrupt [using LED 816, fig. 8a].

Regarding to claim 16, Papa further teaches that the indication of the power down condition is performed with a software function [98, fig. 1].

Regarding to claim 17, Papa further teaches:

- the host computer system sending a power down ready signal [812, fig. 8a] to the second system after said the host driver software entering a quiescent state [802, fig. 8a] and prior to said powering down the second system; and
- the second system displaying a power down ready indicator in response to said sending [816, fig. 8a].

Regarding to claim 18, Papa further teaches:

- wherein said saving configuration information for the second system comprises saving configuration for a first one or more devices comprised in the second system [104, fig. 1]; and
- wherein said restoring second system configuration using said configuration information comprises restoring configuration for said first one or more devices comprised in the second system.

Regarding to claim 19, Papa further teaches that the reconfiguring the second system comprises replacing at least one of said first one or more devices with a device of the same type [154 is replacing 156, fig. 1].

Regarding to claim 20, Papa further teaches:

- wherein at least one of said first one or more devices comprises a non-transparent bridge [200a, fig. 3];
- wherein said second system further comprises a second one or more devices [154, 158, fig. 3] coupled to said non-transparent bridge through an expansion bus comprised in the second system; and
- wherein said reconfiguring the second system comprises reconfiguring said second one or more devices.

Regarding to claim 21, Papa further teaches:

- removing one or more of said second one or more devices [154 is replacing 156, fig. 1];
- adding one or more devices to said second one or more devices [158, fig. 1];
- replacing one or more of said second one or more devices with respective other devices; and swapping one or more of said second one or more devices [154, 156, fig. 1].

Regarding to claim 22, Papa further teaches that the second system comprises a chassis [92a, fig. 1], and wherein at least a subset of said first one or more devices and said second one or more devices comprise cards inserted into said chassis [154, 158, fig. 1].

Regarding to claim 23, Papa further teaches that user reconfiguring the second system comprises exchanging at least one of said cards on the second system [154, 156, fig. 1].

Regarding to claim 24, Papa further teaches that user reconfiguring the second system comprises rearranging one or more of said cards on the second system [154, 156, fig. 1].

Regarding to claim 25, Papa further teaches:

- the host computer system performing a discovery process on the reconfigured second system after said restoring configuration [820, fig. 8a].

Regarding to claim 26, Papa further teaches that the host computer system performing a discovery process on the reconfigured second system comprises the host computer system performing a discovery process on the second one or more devices [adding a new device 158, fig. 1].

Regarding to claim 27, Papa further teaches:

- wherein said host driver software entering a quiescent state [802, 808, fig. 8a] comprises the host driver software placing said first one or more devices and said second one or more devices into a quiescent state.

Regarding to claim 28, Papa further teaches that the second system indicating an online condition [854, 856, fig. 8b] after said restoring second system configuration.

Regarding to claim 29, Papa does not explicitly teach that the user requesting a power down condition for the second system comprises the user pressing a button on the second system. Specifically, the user requested a power down by using input devices. As such, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Papa to include a button for powering down the system.

Regarding to claim 30, Papa does not explicitly teach that the user pressing a button on the second system comprises the user pressing a button on a card comprised in the second system. As such, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Papa to include a button on a card in the second system.

Regarding to claim 31, Papa further teaches that the user requesting a power down condition for the second system comprises the user entering user input to the second system indicating a request for the power down condition for the second system [800, 812, fig. 8a].

Regarding to claim 32, Papa further teaches that the user requesting a power down condition for the second system comprises the user ejecting a card [154, 156, fig. 1] from the second system.

Regarding to claim 33, Papa further teaches that the host driver software does not perform transactions with the second system while in said quiescent state [814, 816, fig. 8a].

Regarding to claim 34, Papa further teaches that reconfiguring the second system comprises one or more of: modifying hardware settings on the second system and/or modifying software settings on the second system [modifying 106 or 108, fig. 1].

Regarding to claim 35, Papa further teaches:

- wherein said host computer system performing said saving configuration information [820, fig. 8a and 870, fig. 8b], said detecting powering up [850, fig. 8b], and
- said restoring second system configuration comprises: said host driver software performing said saving configuration information, said detecting powering up, and said restoring second system configuration.

Regarding to claim 36, Papa further teaches that the indication of the power down condition comprises an interrupt [using LED 816, fig. 8a].

Regarding to claim 38, Strum further teaches:

- a split bridge [col. 1, lines 59 – 60];
- wherein a first portion of the split bridge [120, fig. 7] is comprised in the host computer system;

- wherein a second portion of the split bridge [132, fig. 7] is comprised in the second system;
- wherein said first portion is operable to couple to said second portion via said serial bus [160, fig. 7]; and wherein the split bridge is a transparent bridge operable to mediate communication between the host computer system and the second system [col. 1, lines 59 – 60].

Regarding to claim 39, Strum further teaches:

- wherein host computer system comprises a first bus [120, fig. 7] coupled to said first portion of the split bridge [152, fig. 7], and wherein said second system comprises a second bus [132, fig. 7] coupled to said second portion of the split bridge [158, fig. 7]; and
- wherein each of the first portion and the second portion of the split bridge include parallel/serial transceivers [154, 156, fig. 7] for converting parallel data generated on the first bus and second bus, respectively, to serial data for transmission on the serial bus and for converting data received from the serial bus to parallel data for generation on the first bus and second bus, respectively.

Regarding to claim 40, Strum further teaches:

- wherein the first portion and the second portion of the split bridge collectively implement a register set of the bridge [col. 1, lines 59 – 60].

Regarding to claim 41,

- wherein the first portion and the second portion of the split bridge operate as a single PCI-PCI bridge [50, fig. 1];
- wherein the first portion and the second portion of the split bridge collectively implement a PCI-PCI bridge register set [col. 5, lines 25 – 26]; and
- wherein the first portion of the split bridge operates as a first portion of a PCI-PCI bridge, and wherein the second portion of the split bridge operates as a second portion of the PCI-PCI bridge.

Regarding to claim 42, Papa further teaches:

- wherein the second system comprises a remote system remotely located relative to the host computer system [92c, fig. 3].

Regarding to claim 43, Papa further teaches while in said quiescent state [802, fig. 8a], the host driver software is precluded from performing transactions with the second system.

Regarding to claim 44, Papa further teaches:

- wherein in entering a quiescent state, the host computer system is operable to send a power down ready signal [816, fig. 8a] to the system; and
- wherein the second system is further operable to display a power down ready indicator [816, fig. 8a] in response to said sending.

Regarding to claim 45, Papa further teaches:

- a first one or more devices [154, fig. 1] comprised in the second system [92a, fig. 1];
- wherein, in saving configuration information for the second system, the host computer system is operable to save configuration for a first one or more devices comprised in the second system [110, 112, fig. 1]; and

Regarding to claim 46, Papa further teaches:

- a second one or more devices [164, fig. 3] comprised in the second system [92c, fig. 3];
- wherein at least one of said first one or more devices comprises a non-transparent bridge [200a, fig. 3]; and
- wherein said second one or more devices are coupled to said non-transparent bridge through an expansion bus comprised in the second system.

Regarding to claim 47, Papa further teaches that the host computer system is further operable to perform a discovery process on the reconfigured second system after restoring second system configuration [820, fig. 8a].

Regarding to claim 48, Papa further teaches that in performing a discovery process on the reconfigured second system, the host computer system is operable to perform a discovery

process on the second one or more devices [820, fig. 8a].

Regarding to claim 49, Papa further teaches:

- wherein said host driver software entering a quiescent state [802, fig. 8a] comprises the host driver software placing said first one or more devices and said second one or more devices into a quiescent state.

Regarding to claim 50, Strum further teaches that the second system comprises a chassis [104, fig. 7], and wherein at least a subset of said first one or more devices and said second one or more devices comprise cards inserted into said chassis [134s, fig. 7].

Regarding to claim 51, Papa further teaches that reconfiguring the second system comprises exchanging at least one of said cards on the second system [154, 156, fig. 1].

Regarding to claim 52, Papa further teaches that reconfiguring the second system comprises rearranging one or more of said cards on the second system [154, 156, fig. 1].

Regarding to claim 53, Papa further teaches that user input requesting a power down condition [800, 812, 814, fig. 8a] for the second system comprises a user initiated ejection of one of said cards from the second system [154, 156, fig. 1].

Regarding to claims 54 and 55, Papa does not explicitly teach that reconfiguring the second system comprises modifying hardware settings on the second system. As such, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Papa to allow the system to modify the hardware settings on the second system.

Regarding to claim 56, Papa further teaches that the second system is further operable to indicate an online condition [856, fig. 8b] after said restoring second system configuration.

Regarding to claim 57, Papa does not explicitly teach that the second system comprises a button usable by a user to indicate a request for a power down condition for the second system. Specifically, Papa allows the user to input a request for power down through input devices. As such, at the time of the invention, it would have been obvious to a person of a person of ordinary skill in the art to modify the teachings of Papa to include a button for usable by a user to indicate a request for power down condition.

Regarding to claim 58, Papa does not explicitly teach that the button is on a card comprised in the second system. As such, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the teachings Papa to include a button on a card.

Regarding to claim 59, Papa further teaches:

- wherein said host driver software is executable to perform said saving configuration information, said detecting a link down condition, said polling a register, and said restoring second system configuration [104, fig. 1].

Regarding to claim 60, Papa further teaches that the indication of the power down condition comprises an interrupt [816, fig. 8a].

Regarding to claim 61, Papa further teaches that the interrupt comprises a hardware interrupt [using LED].

Regarding to claim 62, Papa further teaches that the interrupt is performed with a software function [98, fig. 1].

Regarding to claim 63, Papa further teaches that the host computer system is operable to poll a register comprised on the host computer system to determine the link status [fig. 6a].

3. Claims 64 – 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sturm et al [hereinafter Sturm, U.S. Pat. 6,687, 779] in view of Papa et al [hereinafter Papa, U.S. Pat. 6,418,492].

Regarding to claims 64 and 68, Sturm teaches a system for connecting peripheral devices to a computer, comprising:

- a computer system [102, fig. 7], wherein the computer system includes a CPU [112, fig. 7] and memory [116, fig. 7], wherein the computer system includes:
    - a first bus [120, fig. 7]; and
    - a first interface [152, fig. 7] coupled to the first bus, wherein the first interface includes first bus interface circuitry for interfacing to the first bus;
- a remote device [104, fig. 7] located remotely from the computer system, the remote device comprising:
    - a second bus [132, fig. 7];
    - one or more devices [134, fig. 7] coupled to the second bus; and
    - a second interface [158, fig. 7] coupled to the second bus, wherein the second interface includes second bus interface circuitry for interfacing to the second bus;
- a serial bus coupled between the first interface and the second interface[4] [160, fig. 7], wherein the serial bus includes first and second ends, wherein the first end of the serial bus is coupled to a first transceiver [154, fig. 7] and the second end of the serial bus is coupled to a second transceiver [156, fig. 7];
- wherein the first interface [coupled to the first bus 120, fig. 7] and the second interface [coupled to the second bus 132, fig. 7] operate as a single bridge [col. 1, lines 59 – 60]; and

[4] The serial bus coupled between the first interface and the second interface through transceivers [154, 156, fig. 7].

- wherein the first interface[5] and the second interface[6] collectively implement a single bridge register set [col. 5, lines 25 – 26] of the single bridge.

However, Sturm does not explicitly teach:

- a first device is operable to be coupled to the second bus of the remote device and is operable to interoperate with the computer system without requiring rebooting of the computer system; and
- the first end of the serial bus is coupled to the first interface and the second end of the serial bus is coupled to the second interface.

Specifically, Sturm further teaches that the first transceiver and the first interface may combine into a single device and the second transceiver and the second interface may also combine into a single device. Such that, a routineer in the art would clearly recognize that limitation: the first end of the serial bus is coupled to the first interface and the second end of the serial bus is coupled to the second interface is also taught by Sturm.

Papa teaches that:

- a first device [156, fig. 1] is operable to be coupled to the second bus [124, fig. 1] of the remote device [92a, fig. 1] and is operable to interoperate with the computer system without requiring rebooting of the computer system [col. 4, lines 45 – 49, col. 6, line 4 – col. 7, line 29].

Specifically, Papa teaches, in response to a hot-swap request, to only power-down the peripheral device [156, fig. 1] by disconnecting card slot [150, fig. 1] from the second bus [124, fig. 1]. Papa further teaches the details of a configuration register [fig. 6a].

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[5] The first interface included a register [col. 5, line 25].

As such, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Sturm and Papa because they both directed to the teachings of connecting devices to the secondary bus and Papa teaches the details of hot-swap or hot-add which is missing in Strum system.

Regarding to claims 65 and 69, Papa further teaches that a first device [156, fig. 1] coupled to the second bus [124, fig. 1] of the remote device [92a, fig. 1] is operable to be replaced with a second device [154, fig. 1] coupled to the second bus of the remote device, and wherein the second device is operable to interoperate with the computer system, without requiring rebooting of the computer system [col. 4, lines 45 – 49, col. 6, line 4 – col. 7, line 29].

Regarding to claims 66 and 70, Papa further teaches that the second device is the same type as the first device [154, fig. 1].

Regarding to claims 67 - 71, Strum further teaches the first interface operates as a first portion of the bridge, and wherein the second interface operates as a second portion of the bridge [col. 3, lines 17 – 19].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vajirachai Komol [Ben] whose telephone number is (571) 272-5858. The examiner can normally be reached on 6:00 - 3:00.

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[6] The second interface included a register [col. 5, lines 25 – 26].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (571) 272-3667. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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